

DOCUMENT RESUME

ED 212 337

JC 820 047

AUTHOR Curtin, Bernadette M.; Hecklinger, Fred J.
TITLE Job Market Investigation. The Career Life Assessment Skills Series, Booklet Two. A Program to Meet Adult Developmental Needs.
INSTITUTION Northern Virginia Community Coll., Alexandria.
SPONS AGENCY Virginia State Dept. of Education, Richmond.
PUB DATE 81
NOTE 46p.; Conducted as part of the Vocational Guidance and Counseling Project under the Vocational Education Amendments of 1976. For related documents, see JC 820 046-820 052.

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS Adults; *Career Choice; *Career Exploration; Career Planning; Compensation (Remuneration); Decision Making; Employment Opportunities; Employment Projections; Employment Qualifications; Employment Services; Job Analysis; *Job Search Methods; Job Skills; Occupational Information; Occupations; Personality; Rewards; Vocational Interests; Work Environment

ABSTRACT

As part of a series on career and life planning for adults, this booklet provides a guide to the job market and strategies for choosing a career. Part I suggests the reader list prospective careers and preferred job conditions. Part II helps the reader to categorize careers on the basis of requisite skills, occupational classifications, personality types, and job setting. Part III investigates methods of career exploration: gaining experience, obtaining and conducting informational interviews, obtaining and evaluating occupational literature, and consulting other sources, such as counselors and instructors. Included in Part III are worksheets and questions to be used in preparing and evaluating an informational interview. A list of occupational handbooks, dictionaries, guides to training opportunities, and other sources of information is provided in Part IV. Part V outlines factors to be considered when investigating a career; these factors include general questions on the nature of the work and of the work environment; employment projections; training requirements; remuneration; and non-monetary rewards. Part VI examines obstacles to decision making, outlines the steps in the decision-making process, and provides a decision-making worksheet. A 42-item bibliography, information on employment projections in selected fields, and an article on employment prospects in the 1980's are appended. (HB)

* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *

ED212337

JOB MARKET INVESTIGATION

Booklet Two

The Career Life Assessment Skills Series
A Program to Meet Adult Developmental Needs

Bernadette M. Curtin
Fred J. Hecklinger

Project Directors

Vocational Guidance and Counseling Project

Conducted Under

Vocational Education Amendments of 1976

Public Law 94-482

"PERMISSION TO REPRODUCE THIS
MATERIAL HAS BEEN GRANTED BY
Frank J. Hecklinger

1981

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)."

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

☒ This document has been reproduced as
received from the person or organization
originating it.

☐ Minor changes have been made to improve
reproduction quality.

• Points of view or opinions stated in this docu-
ment do not necessarily represent official NIE
position or policy.

Northern Virginia Community College
Alexandria Campus
3001 N. Beauregard Street
Alexandria, Virginia 22311

JC 820047

The Project Directors
would like to express their
appreciation to the following
staff members at the Alexandria
Campus for their contributions
to this booklet.

Ms. Janet Kreachbaum

Layout and Production

Ms. Adele Hight

Resource Materials

Ms. Mary Dumont

Ms. Eva Marie Irrera

Artwork

The Career Life Assessment Skills Series
(CLASS)

This series consists of eight booklets which can be used in conjunction with the CLASS workshops or by themselves. The following topics are covered in the series.

BOOKLET ONE YOUR UNIQUE SELF

This booklet helps you to look at your interests, skills, values, work values, and lifestyle preferences.



BOOKLET TWO JOB MARKET INVESTIGATION

This booklet helps you to research careers, to identify possible new careers that may interest you, and to make effective decisions.

BOOKLET THREE JOB CAMPAIGN STRATEGIES

This booklet helps you learn how to find a job, to know how to handle an interview, to write a resume, and to conduct an effective job search.

BOOKLET FOUR THE FEDERAL EMPLOYMENT PROCESS

This booklet helps you to understand the federal employment process and outlines the best ways to look for a job with the federal government.

BOOKLET FIVE ACADEMIC SURVIVAL SKILLS

This booklet helps you to deal with some of the learning skills needed to be successful when returning to school.

BOOKLET SIX MID-LIFE AND CAREER TRANSITIONS

This booklet helps you to understand what kind of career and life changes people go through and to evaluate your own needs for change.

BOOKLET SEVEN JOB-KEEPING AND REVITALIZATION

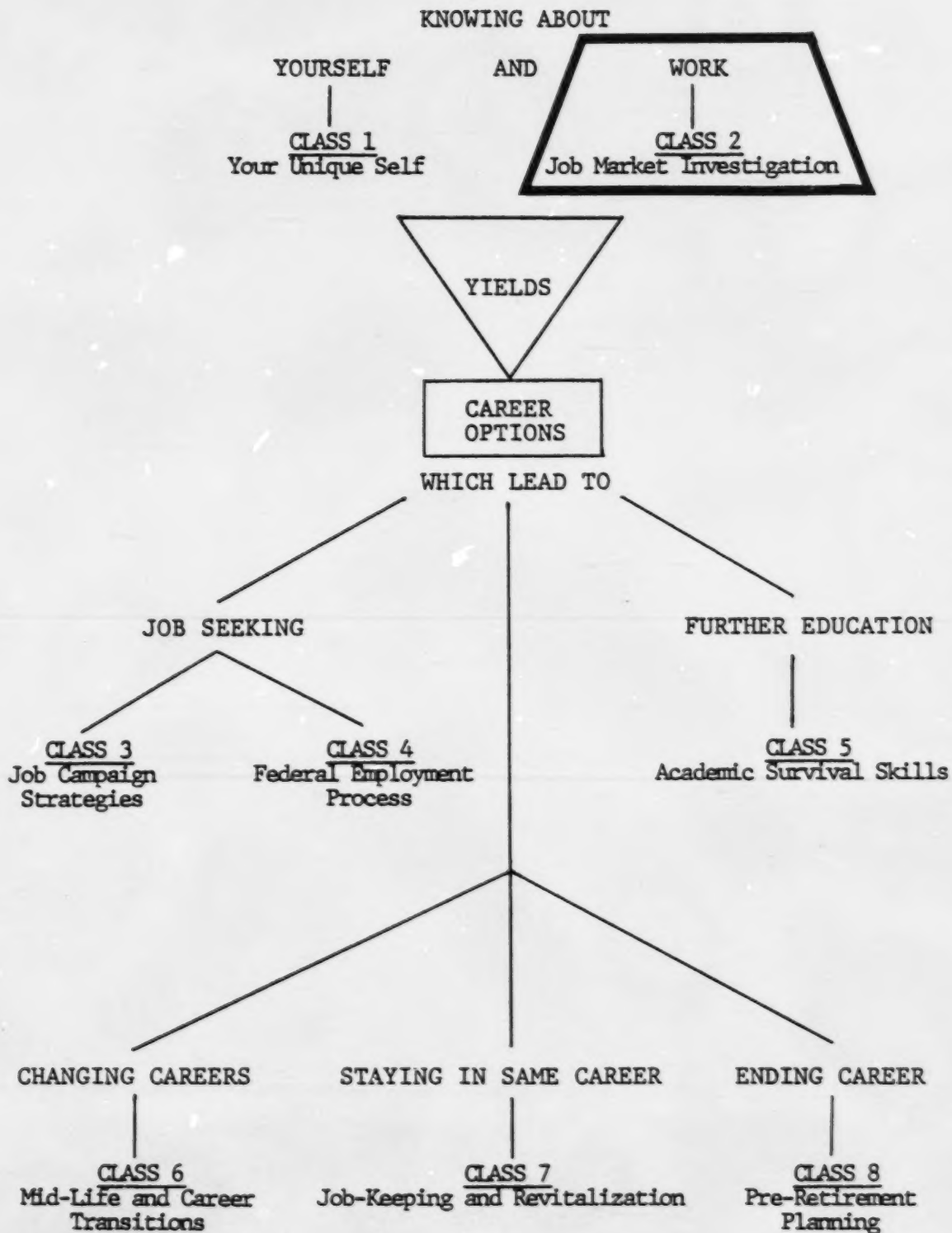
This booklet helps you to maintain your effectiveness and interest in your current job and suggests ways that you can breathe new life into your job.

BOOKLET EIGHT PRE-RETIREMENT PLANNING

This booklet helps you to look at the important issues involved in planning for your retirement and gives you guidelines on how to get started with this process.

CAREER LIFE ASSESSMENT SKILLS SERIES

C.L.A.S.S.



CAREER LIFE PLANNING

Career life planning is a continual process of assessing where you are headed in your life and career and of deciding whether or not you wish to make changes. In order to make these life and career decisions, it is important that you know about three distinct but essential areas:

- Yourself, which involves taking an inventory of your
 - interests
 - skills and abilities
 - work values
 - personal values
 - temperament
 - personality traits
 - lifestyle preference
- The world of work, which involves the evaluation of your own career, if you have one, and other potential careers through
 - research
 - experience
 - informational interviewing
 - decision-making
 - job revitalization
- Other opportunities not necessarily connected with work that may help you to change your lifestyle, such as
 - education
 - leisure activities
 - community service
 - retirement planning

After an in-depth look at your own goals and lifestyle preferences and a comprehensive evaluation of the career change and other options open to you, you will then be ready to make an effective decision.

Making a life or career decision is a big step. At this juncture, you will want to set up a plan to carry out your decision. This might include some of the following short-term goals:

- Obtain more specific training or "brush-up" work on a skill.
- Make some changes in your present job that will increase your job satisfaction.
- Up-date your resume.
- Make changes in your lifestyle.
- Improve your interviewing style.
- Return to school.
- Investigate other job opportunities.
- Become involved in community activities that interest you.
- Plan a second career to enter in a few years.
- Plan for your retirement.

The short-term goals that you establish for yourself will eventually help you to make the changes that you feel are appropriate to fulfill your life and career plans. It is only through planning, evaluating, investigating, reviewing, and decision-making that you can begin to put the career planning process to work for you.

TABLE OF CONTENTS
Booklet Two
JOB MARKET INVESTIGATION

I. Prospecting	10
II. The World of Work	12
III. How to Investigate a Career	15
IV. Selected Resources for Job Market Investigation	25
V. What to Look for When Investigating a Career	29
VI. Decision-Making	34
VII. Bibliography	39
Appendix A	43
Appendix B	44

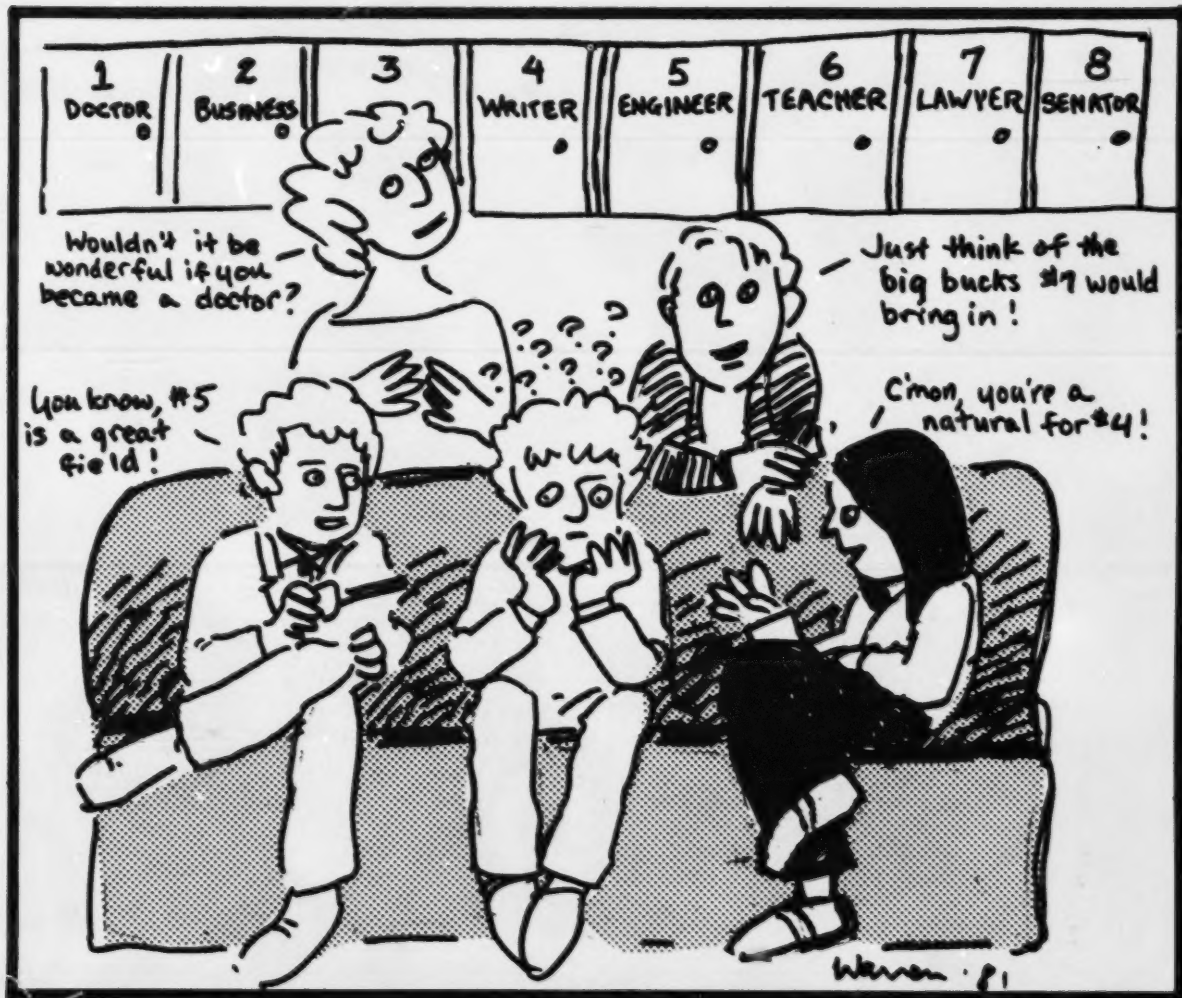
JOB MARKET INVESTIGATION

Booklet Two

Career Life Assessment Skills Series

(CLASS)

An important part of any decision to choose or change your career is to know as much as possible about the career and the job market. This booklet will help you to look at the relationships between different kinds of work and the careers that may be most suited to your needs and values. It will give you some assistance on how to get information about careers and finally it will help you to look at how you go about making decisions.



I. PROSPECTING

You are probably thinking about certain careers and would like to know more about them. Before looking at these careers, it may be helpful to expand your options. One way to do this is to make a prospect list. Start making a list of careers that you have either wondered about or that have interested you. Include those that you have daydreamed about but have never considered possible. Add freely to this list as you consider possible choices.

Prospect List

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

Now expand your list by talking with at least three people who know you well. Ask them for suggestions of careers that they think would be good for you. Add any interesting prospects to your list.

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

You probably now have a list of several good possibilities of careers that may be worth considering. It is also helpful to consider your own work values. In the space below, write down some of the things that are most important to you in your work. For example, do you want to work for a large organization or be self-employed? Do you want to work with many people or work alone? What would you like to do in your ideal work day?

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

Compare this list with the prospect list of possible careers. What careers would give you what you want in a job? Which ones would fulfill most of your work values? Put a check mark next to those careers that you would like to investigate further.

II. THE WORLD OF WORK

When looking at the world of work and considering various career possibilities, it can be helpful to break down types of work into separate units, or categories. Think about where you would best fit into the following categories.

A. Skill Categories¹

Most jobs require skills that can be classified in the following categories:

1. Jobs that deal primarily with data. These jobs involve processing information and would include such occupations as accounting, computer programming, typing, and research.
2. Jobs that deal primarily with people. These jobs involve regular people contact as the primary focus of the job and would include such occupations as teaching, coaching, managing and selling.
3. Jobs that deal primarily with things. These jobs involve doing something with equipment or other tangible things and would include such occupations as farming, truck driving, painting, and repair work.

Although many jobs require skills in more than one of these categories, they usually have a major focus in just one of the three. In what primary skill category would you want your career to fall: data, people or things?

Write your choice here: _____

B. Occupational Categories²

The thousands of careers that exist can be distributed in the following categories:

- | | |
|-------------------------------|--------------------------------|
| 1. Agriculture and | 9. Manufacturing |
| Agri-Business | 10. Marketing and Distribution |
| 2. Arts and Humanities | 11. Natural Resources and |
| 3. Business and Office | Environment |
| 4. Communications Media | 12. Personal Services |
| 5. Construction | 13. Product Services |
| 6. Health | 14. Public Service |
| 7. Home Economics | 15. Transportation |
| 8. Hospitality and Recreation | |

Are there one or two of these categories in which you have a special interest? Does it matter to you in what category you work? If so, list your preferences below:

¹Adapted from Fine, Sidney. Dictionary of Occupational Titles. Washington: U. S. Department of Labor, 1977, p. 1369.

²Trabandt, Joan et. al. Emphasis: Work. Salt Lake City: Olympus Publishing Co., 1977, p. 52.

C. People-Environment Categories³

Certain kinds of people tend to go into certain kinds of work. These can be broken down into six categories.

1. Realistic These people have athletic or mechanical ability, work with objects, machines, tools, plants, animals, like to repair, work with tools, and may like outside work. Occupations include skilled trades, technical, and some service areas.
2. Investigative These people like to observe, learn, investigate, analyze, evaluate, and solve problems. Occupations include scientific and technical areas.
3. Artistic These people have artistic, innovating or intuitional abilities and like to work in unstructured situations, using their creativity or imagination. Occupations include literary, artistic, and musical areas.
4. Social These people like to work with other people--to inform, enlighten, help train, develop, or cure them. Occupations include educational and social welfare areas.
5. Enterprising These people like to work with other people by influencing, persuading, leading or managing for organizational goals or economic gain. Occupations include managerial and sales areas.
6. Conventional These people like to work with data, have clerical or numerical ability, and carry out in detail others' instructions. Occupations include clerical and office areas.

Which one or two people-environment categories seem best suited to your personality and interests?

D. Setting

In what kind of a setting do you want to work? Do you want to work in a large metropolitan area or in a rural setting? Do you want to work indoors or outside? Do you want to work in a large building or in a small shop? Do you want to work in a specific geographical location? In a specific city?

If you have a preference for the type of setting in which you would like to work, write it in the space below:

_____	_____
_____	_____

³Adapted from Holland, John L. The Self Directed Search. Palo Alto, California: Consulting Psychologists Press, 1977.

Now look back at the categories that you have considered and summarize your choices below:

- A. Skill category selected _____
- B. Occupational categories selected _____
- C. People-environment categories selected _____
- D. Setting selected _____

Write in the space below some careers that would include all of the categories you have selected. Ask your friends or family members to help you. Brainstorm--use your imagination.

III. HOW TO INVESTIGATE A CAREER

You have, up to now, looked at some general factors about the world of work and also at some careers that may be appropriate to your interests and values. At this point it is important to look at how to go about finding as much information as you can on a career. There are several ways to go about this, some better than others. They are described as follows:

A. Experience

Perhaps the best way to find out what a career is like is to experience it. Working in an area can give you a good idea about whether or not a particular career is for you. Although this is not always possible, there are several things you can do to obtain this experience:

1. Get a part-time or full-time job in the area. You may be able to start at a low level but still get a good deal of exposure to what the career would involve. You can find out what the people you would be working with are like and can learn much from talking to them. You can find out about the daily routine and about the advantages and disadvantages of the job.
2. Do volunteer work. Many organizations, particularly public service and health areas, have opportunities for volunteers. By volunteering you learn much the same kind of things that you would learn were you actually employed. It would also give you the opportunity to ask questions and to get to know as much about the career as possible.
3. If you are enrolled in a college, explore the possibility of cooperative education. This valuable experience provides an opportunity to receive on the job training, college credit, pay, and job experience and future contacts.

B. Informational Interviewing

Informational interviewing is a simple but effective method of:

Goal #1 - Narrowing your career prospects.

Goal #2 - Developing a list of effective contacts which may eventually lead to a job opening.

The "how to" of informational interviewing may seem difficult and even threatening to some people but the results are well worth the risks! The method is simple. You interview people who are doing the same job you are interested in doing. For example, if you have "retail manager" on your prospect list and you choose to investigate this field further, then select a retail store that interests you and interview the manager. Don't talk with a personnel administrator or a marketing teacher--go right to the source for direct and specific information. Now, your first reaction might be--"But what do I ask? These professional people are busy. I'll feel silly." These immediate fears are legitimate but balance the goals of informational interviewing with these and you may feel differently.

A listing of possible questions is included here for your comfort. Feel free to ask anything you wish. Remember this will not be a "job interview" but an "informational interview." You are in the driver's seat. Ask those questions about the career that you've been really wondering about. Make the interview a benefit for you.

How to Get an Informational Interview

There are three methods you could choose to interview for information:

- 1) Blind method - Call a prospective interviewee whom you do not know and make an appointment for an informational interview. This is how a sample telephone call might go if you called a retail store manager:

Dialogue:

What you try to accomplish:

Sales Clerk, Mandy's: May I help you?

You: Would you give me the name of your store manager please?

Assert yourself.

Sales Clerk: What do you need? May I help you?

Get past the receptionist or clerk.

You: I am doing some personal research on retail management and would like the name of the manager.

Be persistent. You have a right to ask.

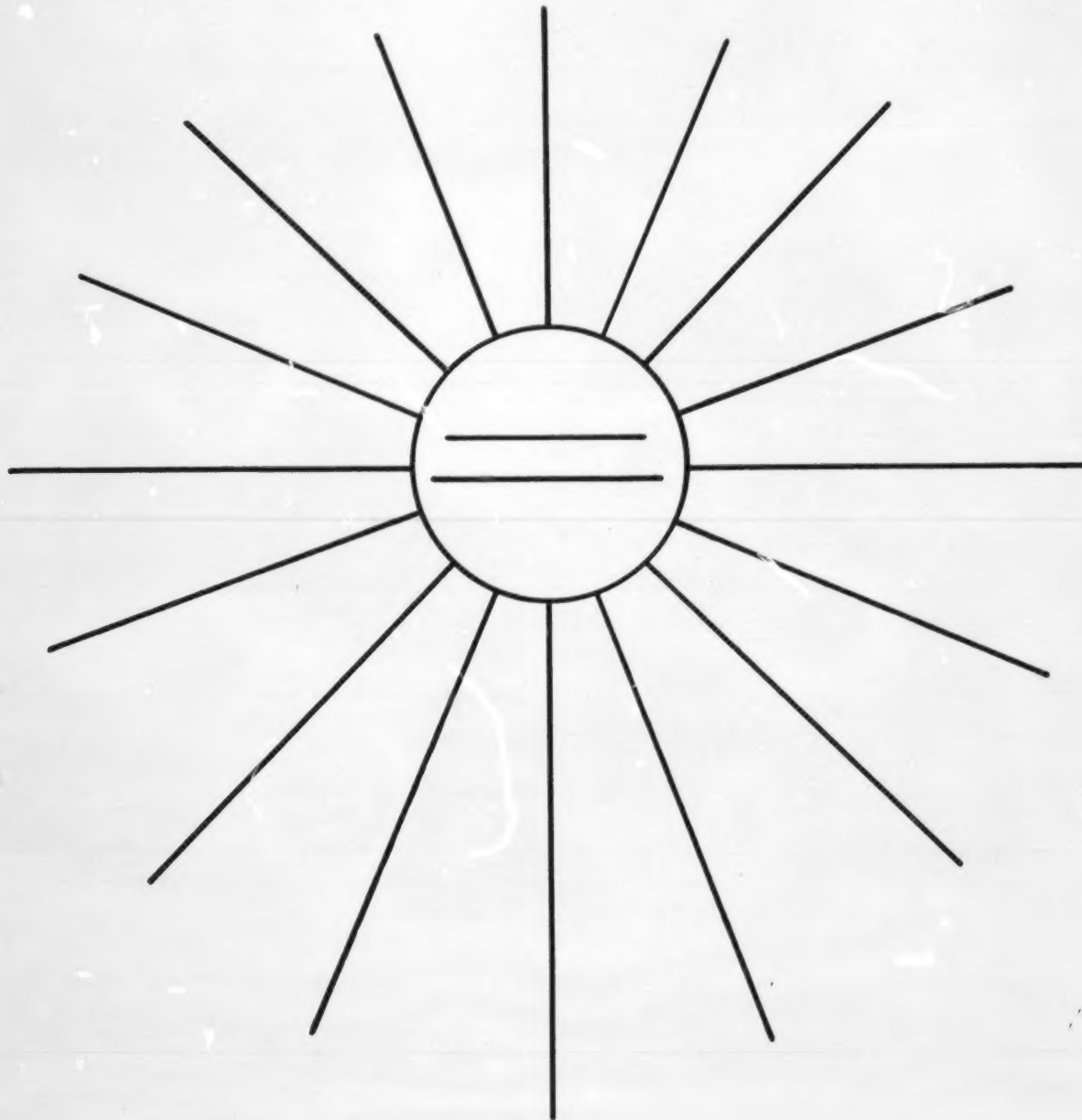
Sales Clerk: Ms. Smith is the day manager here. Would you like to talk with her now?

You: Yes, I would. Thank you.
(Introduce yourself and then set up your appointment to talk directly with Ms. Smith. Remember to bring your list of questions with you.)

- 2) Walk-in method - You "drop in" on a prospective interviewee whom you have located in the Yellow Pages of the phone book. Depending on the type of career research this may or may not be an effective method of informational interviewing. For example, if you are researching the auto mechanics field, you probably would be welcome on a drop-in basis. On the other hand, most business people prefer appointments, so use your own judgement.
- 3) Referral method - This is by far the most successful and rewarding method. You call someone you know or has been referred to you by a friend and ask the potential interviewee for an informational interview. Eighty percent of our

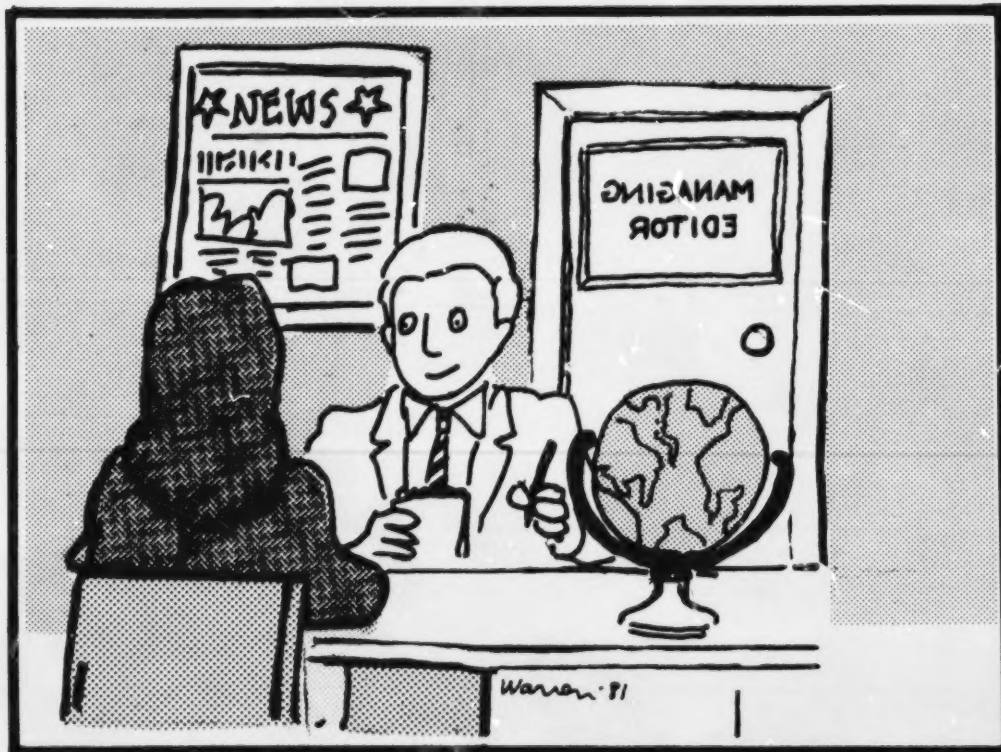
population get jobs through people they already know or through referral by a friend, relative, neighbor, acquaintance, etc. Now it is time to think of people who may be able to help you with your informational interviewing. Place your name in the middle of the circle and work your way around the circle with names of people who might be able to assist you.

NETWORK OF CONTACTS



Informational Interview Worksheet

PREPARE! You will want to give some thought to the kind of questions you want to ask and points you want to discuss so that you leave the interview with the information YOU are seeking. Take some time to write out areas of interest and questions you wish to pursue. You need not take the written list with you (although this is perfectly acceptable and may be beneficial), but writing them out in advance will help you organize your thoughts, be more confident and get the most out of your interview. You will also want to take some time to evaluate what you have learned.



This worksheet has been prepared as a guideline. However, each interview will be a unique experience. You will want to maintain flexibility as you obtain information and increase your knowledge of the field. Try to personalize each interview you arrange. Continue to evaluate your own interviewing procedures. DO NOT LEAVE ONE INTERVIEW WITHOUT AT LEAST ONE ADDITIONAL CONTACT!

What information would assist you in your career decision? _____

What people might help you discover this information? _____

What things might assist you in your research? _____

P.S. Thank you letters written after an interview are greatly appreciated and may single you out for a job.

Possible Questions:

- What is the nature of the work?
- What do you do in an average day?
- What is the range of your duties and responsibilities?
- What are the current issues (problems, needs, plans, etc.) of your organization or field?
- Are the skills of the job performed with people, data or things?
- What tools and equipment are used?
- What are the physical and psychological demands?
- Where is the work performed?
- What type of organizations employ people in this occupation?

- What are the working conditions?
- How does your work fit into the organization as a whole?
- With whom do you work closely?
- How did you get into this field and present position?
- Is the work done inside or outside?
- What are the eligibility requirements for entry into the occupation?
- What kind of skills are required?
- What kind of education is required?
- What kind of specialized training is required?
- What is the employment outlook both locally and nationally?
- What are the projections about employment opportunities in geographic areas which you prefer?
- Are job opportunities in this field increasing, decreasing, or remaining stable?
- What opportunities are there for career mobility?
- Does this occupation offer you the opportunity to acquire skills and responsibilities that would allow you to advance in that organization?
- Could you use those skills acquired in another organization or another job?
- What is the probable and potential earning power?
- What is the pay range and benefits (i.e., insurance, vacations, fringe benefits)?
- How rapidly do pay and benefits increase?
- Is there a maximum possible income?
- What are the advantages and disadvantages?
- What gives you the most enjoyment?
- If you could change the job in some way, how would you change it?
- What compromises do you find most difficult to make in this job?
- What advice would you give a person considering this occupation?

--Where can I get further information? (Get several names if possible.)

Name: _____ Title: _____

Organization: _____

Address: _____

Phone: _____

Name: _____ Title: _____

Organization: _____

Address: _____

Phone: _____

Name: _____ Title: _____

Organization: _____

Address: _____

Phone: _____

Evaluating Your Interview

What positive impressions do you now have about this career? (Think in terms of yourself: interests, skills, values, goals).

What negative impressions do you now have about this area of work?
(Again, evaluate in terms of yourself: your interests, skills, values
and goals).

How did this interview help you to clarify your own career objective?
If it did not, why not?

C. Printed Material

A large amount of printed material is available covering career choice, the job market, and information on specific careers. This material can be found in college and public libraries and much of it is available in paperback format at local bookstores. When using printed material, it is important to ask yourself the following questions:

1. Is the information accurate? Check more than one source.
2. Is the information current? What is the publication date?
If it is several years old, check another more recent source.
3. Is the information comprehensive? Does it give enough detail about the career? Where can you obtain additional information?
4. Is the information given in an unbiased way? Are there any age, sex, or minority biases in the printed material?

Regardless of the quality or quantity of the printed materials available to you, it is important to keep the following points in mind as you read information on various careers:

1. The source of information may be somewhat biased. Information provided by industries about their own particular field tend to paint a somewhat "rosy" picture of the careers and opportunities in them.
2. There is always a time lapse factor when considering job forecasts. Even the most up-to-date material is somewhat dated when it is published. Supplement information in books with that found in newspapers and magazines.
3. The relationship between supply and demand may be unclear. If there is currently a shortage, how many people are preparing for the field? Is it a field where there are limited opportunities? What are the actual number of positions projected to become available in the foreseeable future?
4. Forecasts do not allow for different job-hunting approaches. There will always be some jobs available in every field. Forecasts simply give you an indication of how hard you will have to work at finding a job in your chosen field.



D. Other Sources

In addition to experience, informational interviewing, and printed materials, some other sources of information on careers are as follows:

1. Talking with friends, family, and friends of friends who have knowledge of the career you are considering.
2. Officials of unions or professional organizations.
3. Contact a community service agency in order to identify someone in your area of interest. Agencies such as botany, Lions Club, Chamber of Commerce may be of help.
4. Talk with instructors and heads of programs in local colleges and universities about their fields.
5. Career counselors often have an excellent perspective on the job market and can assist you in evaluating your alternatives.
6. Contact anyone in the community who is in the information business, such as newspaper editors, resource center directors, and librarians.

Remember never to base a decision on what one person says. Talk with at least two or three people about a specific career.

The following is a list of some of the printed materials on career information and the job market that can be found in the Career Resource Center at the Alexandria Campus of Northern Virginia Community College. Many of these materials are also available at other college and local libraries.

In addition to the materials listed here, other printed information can be obtained from the following sources:

1. Government agencies
2. Private companies
3. Professional, union, and industrial organizations
4. Commercial publishers
5. Newspapers
6. Periodicals

IV. SELECTED RESOURCES FOR JOB MARKET INVESTIGATION

A. Handbooks and Job Facts

The publications listed below give specific facts about major career fields including job trends and employment projections.

1. The Occupational Outlook Handbook, 1980-81. Government Printing Office, Washington, D.C.
This book, put out by the Department of Labor, will give you a thumbnail sketch of thousands of different occupations, including nature of the work, places of employment, qualifications needed, earnings and working conditions, and even employment outlook in the future. A MUST for every career hunter!
2. Career Information Center Directories. Butterick Publications. 1979.
Similar in format to #1. Includes Volumes I to XIII, one for each career cluster.
3. Careers Tomorrow. Gene R. Hawes. New American Library. 1979.
Excellent, concise section on job trends for each occupation.
4. Chronicle Guidance Occupational Briefs. Updated on a four year cycle.
Over 500 individual occupational briefs. Similar to #1 but more specific. Seven volumes with an index to occupations.
5. Dictionary of Occupational Titles (DOT). U.S. Employment Service. 1977.
By the use of a nine digit code, the DOT classifies virtually all jobs in the United States. This has been done to compare and match the specifications of employer job openings and the qualifications of applicants who are seeking those jobs. An explanation of the code can be found in the introduction. Practically every resource on career research refers to this DOT number.
6. The Encyclopedia of Careers. J.G. Ferguson Publishing Co. latest ed.
Volume I includes 71 articles describing every major career field;
Volume II gives specific facts about 650 occupations based upon DOT occupational group arrangement.
7. Exploring Apprenticeship Careers. Charlotte Lobb. Richards Rosen Press Inc. 1978.
There are more than 300 apprenticeable trades in the United States. This book is for those who wish to move from wherever they are now-- into an apprenticeship program.
8. Exploring Careers. Government Printing Office, Washington, D.C. 1979.
A book which assesses your personal interests and skills and how they relate to various occupations.
9. The Guide for Occupational Exploration. Government Printing Office, Washington, D.C. 1979.
Emphasis on how your interests and abilities relate to occupations. Tells you what knowledge and skills the worker must have and the training required to be successful.

10. The Guide to Career Education. Muriel Lederer. Quadrangle Books, 1976.
Focus is on "points to consider" before going into the field of your choice.
11. The Job Hunter's Guide to Eight Great American Cities. 1978.
Atlanta, Boston, Denver, Phoenix, Portland, San Diego, San Francisco, and Seattle.
12. The Job Market. Richard Lathrop. The National Center for Job Market Studies. 1978.
For applicants who seek a further understanding of the forces which they must contend with when they barter their abilities in the job market.
13. Job Hunter's Handbook. Harvard University Press. 1978.
A look at what the students use at Harvard University to help them in the job hunt.
14. The Job Outlook in Brief, 1980-81. Government Printing Office, Washington, D.C.
A reprint from the Spring 1980 Occupational Outlook Quarterly. The "Brief" provides outlook information in a format that allows you to compare job prospects in different fields easily and helps you to evaluate your job prospects.
15. Jobs 80-81: Where They Are, How To Get Them. William Yeomans. Berkley Publishing Company.
Good for its section on how to contact employers.
16. Matching Personal and Job Characteristics. Government Printing Office, Washington, D.C. 1978.
A reprint from the Fall 1978 Occupational Outlook Quarterly. 23 occupational characteristics and requirements are matched with 281 occupations chosen from the 1978-79 Occupational Outlook Handbook.
17. Occupational Projections and Training Data. Bureau of Labor Statistics. 1980.
An indispensable aid for those interested in job trends and job outlooks, projected to 1985.
18. 100 Careers: How To Pick the One That's Best For You. Laird Durham. Prentice Hall Inc. 1977.
A discussion of the nature of the work, what successful people like and dislike about it, and how successful people advise you to get started. Each career is also given ratings that tell you what you can expect in riches: in money, in social prestige, and in the way of interesting, challenging work.
19. Principal Employers of the Metropolitan Washington Area. Metropolitan Washington Board of Trade. 1978.
Categorized by size of organization. Lists the employers, contact persons, titles, and addresses.
20. The Professional Careers Kit. Updated monthly.
Individual occupational briefs similar in format to the Occupational Outlook Handbook. Also lists degree programs and colleges which are accredited by the appropriate agency, e.g., ABA for law, AMA for medical. Index to occupations is included.

21. Salary Survey Reports. College Placement Council.
Gives the monthly beginning salary offers to candidates by curriculum and employer. Mainly four year college graduates.
 22. What Can I Do With a Major In...? Lawrence Malnig. Saint Peter's College Press, 1979.
An extensive listing "by major" of 1) positions you qualify for
2) institutions and organizations that hire you, and 3) jobs currently held by graduates in that major.
 23. The Work Book: A Guide to Skilled Jobs. Joyce Slayton Mitchell. Bantam Books. 1978.
Brief and concise answers to essential questions we all ask about jobs.
- B. The career resources listed below will lead you to organizations that offer employment opportunities, training programs and internships and the qualifications necessary for selection.
1. Career Employment Opportunities Directory. Ready Reference Press. 1980.
Divided into four volumes: Liberal Arts and Social Sciences, Business Administration, Engineering and Computer Sciences, Sciences. Gives the name and a brief description of the organization offering the employment opportunity, a detailed description of the career opportunities available, any special training programs available, location, benefits, and person to contact.
 2. Career Guide to Professional Associations: A Directory of Organizations by Occupational Field. The Carroll Press. 1980.
Similar to #1. A complete directory of organizations arranged alphabetically including address, telephone number, and career fields represented.
 3. Career Information for College Graduates. College Placement Council. Latest ed.
An annotated bibliography designed as a guide to the directories of various types of organizations which employ college graduates, including liberal arts, engineering and business candidates.
 4. College Placement Annual: The Official Occupational Directory. College Placement Council. 1981.
Lists the principal employers who recruit college graduates. Includes name and address of the organization, name of the parent firm and/or subsidiary, name and title of the recruitment representative, the region in which the organization recruits, and the occupational openings for which the organization will recruit.
 5. Directory of Career Resources for Women: A Comprehensive Guide to Career Resources and Opportunities for Women. Ready Reference Press. 1979.
Virtually every type of career resource is covered, including career development seminars, job referral services, talent banks, special training, resume preparation, career counseling, fellowships, continuing education courses, re-entry programs, etc.
 6. Directory of Career Training and Development Programs. Ready Reference Press. 1980.
Describes in detail training programs available from business, government, and professional organizations. Includes program title, qualifications, length of training, type of training, benefits, and contact person.

7. Directory of College Recruiting Personnel. College Placement Council. 1980.
Similar to #4. Lists name of organization, its address, nature of business, number of employees, whether it recruits nationally or regionally and, if regionally, in what areas. Gives the names, titles, and telephone numbers of recruiting personnel.
8. Directory of Internships, Work Experience Programs, and On-the-Job Training Opportunities. Ready Reference Press, 1976.
Includes program title, purpose, nature of assignment, duration, eligibility, number of awards, financial data, special requirements, application deadlines, and person to contact.
9. The Federal Career Directory. U.S. Civil Service Commission. latest ed.
Section I describes the jobs available through the Federal Government; Section II describes the various agencies and the types of positions they fill; Section III lists the major fields of study which are considered valuable background for government employment.
10. Federal Employment Directory. Federal Employment Directory Service. Bethesda, Maryland.
Telephone listing of Government Personnel Offices.
11. Federal Yellow Book. The National Press, Washington, D.C.
A Must for those seeking contact with people in Federal Government agencies. Gives the telephone numbers of more than 25,000 top people in government include the departments, independent agencies and regional offices.
12. The National Career Directory: An Occupational Information Handbook. Barry Gale. Arco Publishing Co. 1979.
This book will lead you to the addresses of those organizations and agencies which provide free or inexpensive materials on the career you are researching.
13. National Trade and Professional Associations of the U.S. A Great directory for finding the association that deals with information on your career interest area. Associations can be great places to contact for more career information, local contacts working in that field, etc.
14. Stopout! Working Ways to Learn. Joyce S. Mitchell. Garrett Park Press. 1979.
For those students who want to stop-out of college temporarily. Programs listed are open to all students, do not require a college degree, do not charge tuition or fees and is more than just a summer program. Describes internships and volunteer programs which are work oriented.
15. Summer Employment Directory of the United States 1980. Job openings are clearly defined; instructions are precise on how to apply.
16. Washington V. The Granddaddy (or Grandmommy, depending on your orientation) of all directories for Washington, D.C. Purports to list all the public and private agencies and organizations in the Washington, D.C. area in such diverse fields as government, the media, cultural institutions, businesses, community affairs, etc.

V. WHAT TO LOOK FOR WHEN INVESTIGATING A CAREER

You have an idea of what careers you wish to investigate and how to go about finding information. What is it you want to find out? What are some of the things you should look for when you are talking with people and reading about a career?

A. General Questions

What is the nature of the work? What functions are performed by the workers involved in this occupation? Are those functions performed with people, data or things? What is a typical day in the life of a person in this occupation like? Do the daily activities of this occupation interest me?

Where is this work performed? What types of organizations employ people in this occupation--schools, hospitals, governmental agencies, private business, etc.?

With what type of people will you be working? What type of people often go into this occupation and will, therefore, be your co-workers? What type of supervisor or boss might you have?

What are the eligibility requirements? What kinds of skills, education and/or specialized training are required for entry into this occupation?

What is the employment outlook? Are job opportunities in this field increasing, decreasing or are they remaining stable? What are the projections about employment opportunities in geographic areas which you prefer?

What opportunities are there for career mobility? Does this occupation offer you the opportunity to acquire skills and responsibilities, allowing you to advance to a higher level position in the same organization? Or could you use those acquired skills in a different organization or in a job with a different content?

What is the probable and potential earning power? What pay range and benefits (i.e., insurance, vacations, fringe benefits, etc.) can you expect upon entering a particular occupation? How rapidly, and to what extent, do pay and benefits increase in a particular occupation?⁴

B. Employment Projections

Evaluate how many jobs will be available in the career you are investigating and where these jobs will be. Ask yourself the following questions:

1. How many actual jobs will be available? If information you read indicates a 30% growth rate in an occupation over the

⁴Trabandt, Joan et. al. Emphasis: Work. Salt Lake City: Olympus Publishing Company, 1977, p. 15.

next five years, what is the starting point? If there are 20,000 total jobs in the field, a 30% growth rate would mean that 6,000 jobs would be created. If there are 100,000 jobs in a field, the same 30% growth rate would create 30,000 jobs. The second would be a better choice, since five times as many jobs would be available.

2. Will the career be affected by fluctuations in the economy? Some occupations such as construction and travel may be much more dependent on a good economy than others such as computer programming, health, and accounting.
3. How many people are preparing for an occupation at the present time? If a certain occupation is growing modestly but is also very "in," with many people entering the field, the number of job seekers will soon outstrip the demand.
4. Do you wish to work in a specific geographical area? If your choice is limited by the area in which you plan to live, good employment projections in some fields may not be of value to you if you are not mobile.
5. For some projections for careers in the 1980s, read the information found in the appendix of this booklet.

C. Training Requirements

Consider the amount and type of training required for entry into a career. Ask yourself the following questions:

1. Is a college degree required for entry, even at a basic level? In some occupations, there are so many people who want to become employed that the entry level requirements are driven up to a high level. For example, someone who wishes to become a social worker may need a master's degree simply to compete for jobs with others who have master's degrees.
2. Is certification required? People who wish to enter many of the health professions must meet state certification requirements and may have to take qualifying exams.
3. How important is experience in obtaining a job in a given field? The job market for some careers dictates the need for hands-on experience as well as education. Part-time work, cooperative education, or volunteer work can be useful in such situations.
4. Are there alternative ways to get training for an occupation? If so, is one better than the others? For certain occupations, you may have a choice between a public college, a private college, or a proprietary specialty school. It is important to evaluate the costs, the type of training provided, and the merits of each as preparation for the job market.
5. How long will the training take? Some careers require a long time commitment for entry. Others can be entered in a relatively

short period of time with minimal training. What type of commitment can you realistically make to become trained for a certain career?

6. Can a career be entered with the skills you already have? Is additional training really necessary? If you have worked before, you have a variety of transferrable skills. Does the new career you are considering really require new skills or can you use the same skills you used in your past work, with simply a different focus?
7. Are there union or on-the-job training programs? Some unions run apprenticeship programs and some companies have extensive training programs that they provide for their employees.
8. If a college degree is required, must it be in a specific field? Some potential employers may require a degree which indicates that specific training has been a part of the academic program. Other employers may want a more general degree indicative of a more diversified approach to education.

D. Salary and Benefits

Your informational interviewing and reading should provide you with some information on the general range of salary you can expect in a given career. You should consider the following questions.

1. How important are salary and benefits to you? If high salary and good benefits are primary values for you, then this should be a significant factor in choosing a career.
2. What is the salary range? Some careers require a low level entry point but offer good potential for raises and bonuses. Other careers have relatively fixed maximum salaries and limited chances for advancement.
3. What is the method of payment? Some of the alternatives are as follows:

a. annual salary	f. payment by the piece
b. hourly wage	g. payment of a fee for services rendered
c. commission	h. payment of a retainer for services to be rendered
d. wages plus commission	
e. wages plus tips	
4. What are the benefits that are available? Some jobs provide a large number of benefits, others very few. Some of these benefits are as follows:

a. health insurance	j. disability insurance
b. life insurance	k. credit union
c. retirement	l. company car
d. sick leave	m. free parking
e. paid vacation and holidays	n. clothing and equipment
f. expense account	o. tuition assistance
g. profit sharing	p. discount privileges
h. bonus	q. medical facilities
i. employment compensation	r. recreational facilities

Worksheet for Investigating a Career

1. What would I do? How would I spend a typical day at work?
2. Training requirements - how long will it take to get ready to enter the field?
3. Projections - how does the future job market look?
4. Salary and benefits - What can be expected?
5. What are the non-monetary rewards?
6. Is there career mobility?
7. With what type of people would I be working?

E. Non-Monetary Rewards and Other Factors

In addition to salary and benefits, there are other less tangible rewards that may or may not be important to you. You should consider the following questions.

1. What is the work environment? Do people seem to get along well together? What style of supervision is provided? Is it appropriate for you?
2. Do you want to work with other people around or by yourself? Do you need an environment free from distractions or do you like it rather hectic?
3. Are there opportunities for positive feedback? Do people compliment one another or is there a highly competitive spirit?
4. Can you be independent or must you do someone else's bidding most of the time? To what extent is the work you do dependent on someone else's work?
5. What kind of hours are required? Do people work long hours with no overtime pay? What kind of flexibility of time would you have? Are you fixed into a certain schedule or do you have more control over the hours you work?
6. How will the job affect your family responsibilities? Will it take a considerable amount of time from your family? Is this acceptable to you?
7. What kind of variety exists? Will you be doing the same thing every day? What opportunity is there for personal and professional growth?
8. Are you philosophically in tune with the job and with the organization? Do you believe in what you would be doing? Is the job consistent with your values?
9. Can you transfer your work from one geographic location to another? Once you have settled in a job are you tied to that area or are you mobile?
10. Are there visible end products so that you can see what you have accomplished or are the results of the work more vague? What kind of payoff do you need?
11. Some other factors you may want to consider are as follows:
 - a. Travel requirements
 - b. Challenge
 - c. Risk
 - d. Prestige
 - e. Physical setting

VI. DECISION-MAKING

As you investigate possible careers and the job market, you will obtain information that can be very helpful to you in making effective decisions. There are other factors that you should also consider when the time comes to make a decision. By carefully evaluating these factors, your decision has the potential of becoming more rewarding to you and more consistent with your own values and needs.

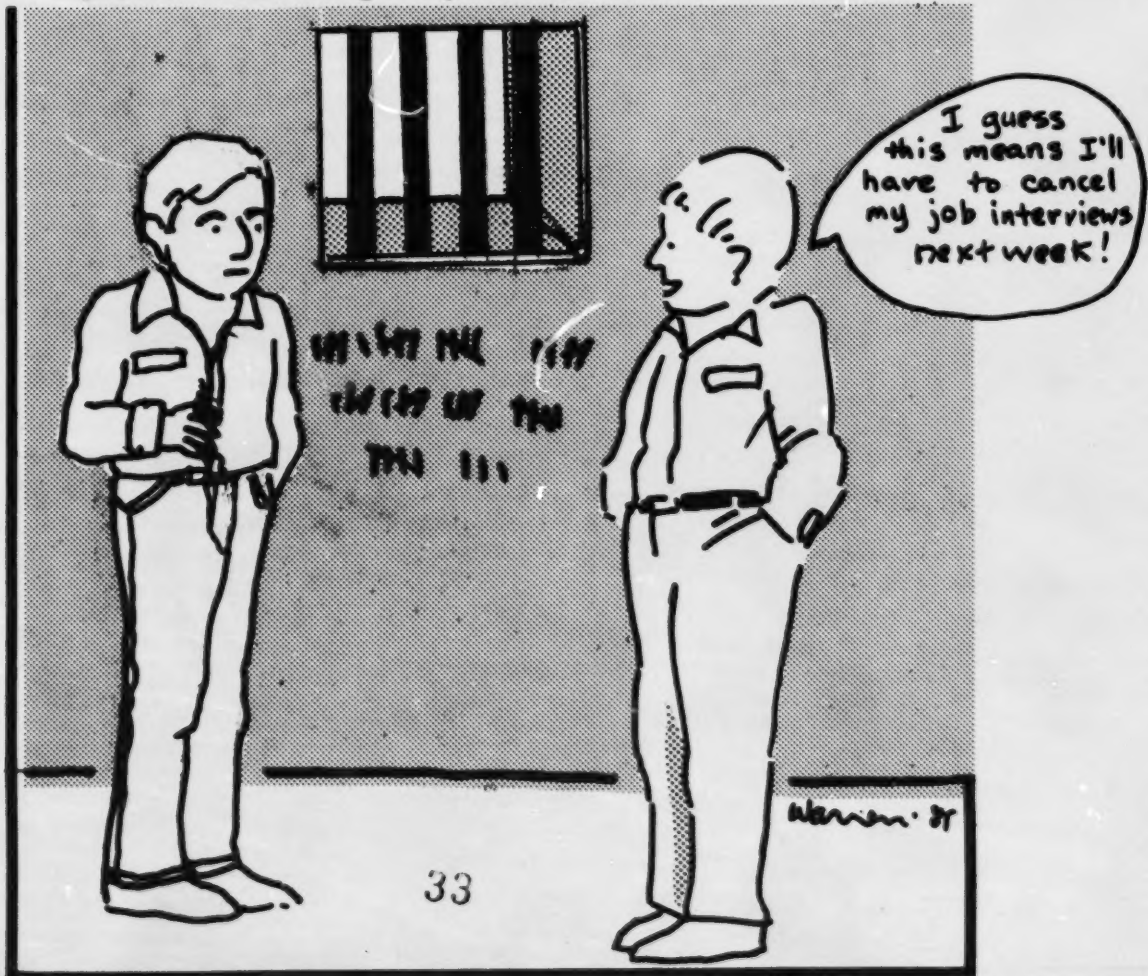
A. Identify the decision to be made.

If you are considering a change of careers, do you really want to change? Even if, after evaluating your options, you decide to stay with your present career, you have made a decision and will be able to accept your situation better than if you simply put off making a decision.

If you are choosing a career, what are the factors involved? What do you want to accomplish and what do you have to know in order to make your decision?

B. What kind of obstacles are you facing?

An obstacle to decision making is anything or anyone that prevents you from considering all your alternatives.



You are probably facing two types of obstacles as you work on making a decision. They are external and internal obstacles.

1. External obstacles are those which are imposed by others or by situations. Examples are family responsibilities, societal stereotyping, time, geography, and money. These are specific barriers over which you may or may not have some control. For example, an obstacle to a career change would be money. If you want to quit your job and return to school to train for a new career, your loss of income may not allow you to maintain your family responsibilities. In many cases you do have considerable influence on external obstacles if you creatively look at ways to get by them.
2. Internal obstacles are much more common and involve your own barriers to making a decision. Examples of internal obstacles are fear of failure, fear of taking a risk, procrastination, and fear of making the wrong decision. You do have control over these obstacles, since they are created by you. If you can identify some of the obstacles that you create for yourself, you can more effectively deal with them.

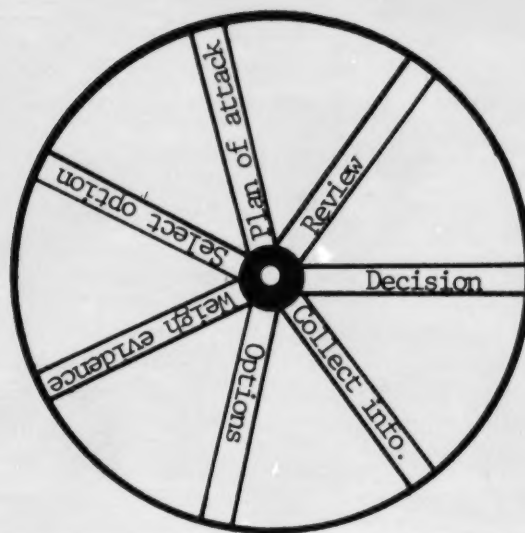
C. When making a decision, always have an alternative.

If you are considering a certain career, don't simply start preparing for it without looking at alternatives. Pick a career possibility that looks almost as appealing to you as the one you are considering. Then compare the two. List the relative advantages and disadvantages of each. Ask yourself the questions in this booklet and apply the answers to each. You may still decide on your original choice, or you may find out that there are some distinct advantages to your alternative. In any case, you will have made your decision in a more thoughtful way and will have a better chance of being satisfied with it.

D. When making a decision, follow a logical procedure.

In order to make an adequate decision we need to develop a procedure to aid us in evaluating the issues at hand.

1. The decision - Identify the decision you wish to make.
2. Collect information - Gather important information related to this decision. Clarify any misconceptions you have about your options.
3. Options - Check to be sure you are being realistic in your decision making. Recognize any obstacles and plan your strategies.
4. Weigh the evidence - Take a close look at all the aspects of your options. Check the pro's and con's; test the reactions of the significant people in your life.



5. Select an option - At this level examine the risks and your degree of commitment to accept responsibility for your decision.
6. Plan of attack - Develop a time table to achieve your goal in a manner that is most likely to be successful. How will you implement your decision?
7. Review - Reevaluate periodically to see if any adjustments are necessary. If needed, adjust your decision.



Worksheet for Making a Decision

1. What is the decision to be made?
2. What are the obstacles to be faced?
3. What are the alternatives?
4. What are the advantages and disadvantages of each alternative?
5. Which alternative seems best?
6. How do you follow through to achieve the alternative you selected?

SUPPLEMENT TO
JOB MARKET INVESTIGATION

BIBLIOGRAPHY

1. Allied Health Education Programs in Junior and Senior College. U.S. Department of Health, Education and Welfare, latest edition.
2. Alternative Careers for Teachers. Independent Publishers, 1980.
3. The Ambitious Woman's Guide to a Successful Career. AMACOM, latest edition.
4. Barron's Guide to Law Schools. Barron's Educational Series, 1980.
5. Barron's Guide to Medical, Dental and Allied Health Science Careers. Barron's Educational Series, 1980.
6. Blue Collar Jobs for Women. Muriel Lederer. E.P. Dutton, 1979.
7. The Book of Trades. Peter Smith Publishers, latest edition.
8. Career Alternative: A Guide to Business Venturing. E.P. Dutton, 1979.
9. Career Dynamics: Matching Individual and Organizational Needs. Addison-Wesley Publishing Company, 1978.
10. Career Education Cookbook. Learning Publications, 1979.
11. Career Education Potpourri. Learning Publications, 1980.
12. The Career Encyclopedia. Dow Jones-Irwin, 1980.
13. Career Guide to Professional Associations. The Carroll Press, 1980.
14. Career Opportunities in the International Field. School of Foreign Service, Georgetown University Press, 1977.
15. Careers: Eighty to Eighty-One. Vitality Associates, 1980.
16. Careers in Foreign Languages: A Handbook. Regents Publishing Company, 1975.
17. Careers in Organizations. Goodyear Publishing Company, 1976.
18. Careers Today: A Guide to Good Jobs Without a Degree. Traplinger Publishing Company, 1977.
19. Careers Tomorrow. New American Library, 1979.

20. The Complete Career Guide. Simon and Schuster, 1980.
21. The Complete Job Book. Cornerstone, 1980.
22. Design for Change: A Guide to New Careers. Watts, 1980.
23. Developing Women Managers: What Needs to be Done? AMACOM, 1978.
24. A Directory of Undergraduate Internship Programs. The National Society for Internships and Experiential Education, 1980.
25. Earning Money Without a Job. Holt, Rinehart and Winston, 1979.
26. Exploring Careers in the Humanities: A Student Handbook. Government Printing Office, 1976.
27. Exploring Careers Through Part-Time and Summer Employment. Richards Rosen Press, 1977.
28. Exploring Careers Through Volunteerism. Richards Rosen Press, 1976.
29. Exploring Music Careers. Government Printing Office, 1976.
30. Exploring Theater and Media Careers. Government Printing Office, 1976.
31. Exploring Visual Arts and Crafts Careers: A Student Handbook. Government Printing Office, 1976.
32. Exploring Writing Careers. Government Printing Office, 1976.
33. The Future File: A Guide for People With One Foot in the 21st Century. Learning Concepts, latest edition.
34. Getting Ready for the World of Work. McGraw-Hill Book Company, 1980.
35. The Gourman Report: A Rating of Graduate and Professional Programs in American and International Universities. National Education Standards, 1980.
36. The Gourman Report: A Rating of Undergraduate Programs in American and International Universities, National Education Standards, 1980.
37. Growing: A Woman's Guide to Career Satisfaction. CBI Publishing Company, 1980.
38. A Guide for Pre-Medical Students. Leape, Martha. Harvard University Press, 1977.
39. The Guide to Career Education. Lederer, Muriel. The New York Times Book Company, latest edition.
40. A Guide to Education for the Health Professions. Acropolis Books, 1979.
41. A Guide to Government and Public Service Employment. Harvard University Press, 1978.

42. A Guide to the Health Professions. Weiss and Spence. Harvard University Press, latest edition.
43. Handbook of Health Careers: A Guide to Employment Opportunities. Human Sciences Press, 1980.
44. Health Careers Guidebook. U.S. Department of Labor, 1979.
45. Health Careers Reference Manual. Virginia Council on Health and Medical Care, latest edition.
46. How to Get Into Law School. Strickland, Rennard. Hawthorn Books, Inc., latest edition.
47. How to Get Into Medical and Dental School. Shugar and Shugar, 1977.
48. Human Services: New Careers and Roles in the Helping Professions. Charles C. Thomas Publishing Company, 1978.
49. International Jobs: A Handbook for Over 500 Career Opportunities Around the World. Addison-Wesley Publishing Company, 1979.
50. The Job Catalog. Mail Order, U.S.A., Washington, D.C. 1980.
51. Jobs 80-81. Berkley Publishing Company, 1980.
52. Jobs for Weekends. Berkley Publishing Company, 1978.
53. 1980 Journalism and Scholarship Guide. Prepared by The Newspaper Fund.
54. Law School and Bar Admission Requirements. American Bar Association, 1980.
55. Licensed Occupations in Virginia. Virginia Occupational Information Coordinating Committee, 1980.
56. The Managers-Career Alternatives for the College Educated. Richard Thain. College Placement Council, 1978.
57. The 1980 National Directory of Summer Internships. NDSI, Career Planning Office, Haverford College, Pennsylvania.
58. New Catalyst Career Book. Simon and Schuster, 1980.
59. Nontraditional Careers for Women. Jullian Messner, latest edition.
60. One Hundred Thirty-Two Ways to Earn a Living Without Working. St. Martin's Press, 1979.
61. Pharmacy School Admission Requirements. American Association of Colleges of Pharmacy, Third edition.
62. Popular Careers. Skyview Publications, 1980.
63. Pre-Law Handbook. The Association of American Law Schools, 1979-80.

64. Preparing for Work. Victor Books, 1980.
65. Professionals and Paraprofessionals. Human Sciences Press, 1978.
66. Recreation and Leisure Time Careers. Vocational Guidance Manuals, latest edition.
67. Technician Education Yearbook. Prakken Publications, 1979.
68. 391 Ways to Explore Arts and Humanities Careers. Government Printing Office, latest edition.
69. Time for New Ways in Careers and Employment. B'nai B'rith Counseling Center, 1979.
70. The Trees Jobs Grow On. Wendover Press, 1980.
71. Vocational Opportunities. Olympus Publishing Company, 1978.
72. Vocational-Technical Public Schools and Institutes in the U.S. Minnesota Scholarly Press, 1979.
73. Where the Jobs Are. Chilton Book Company, 1980.
74. Women and Health Careers: A Guide for Career Exploration. The Program on Women, Northwestern University, latest edition.
75. Women in Law Enforcement. Charles C. Thomas Publishing Company, 1980.
76. Working for Yourself. Rodale Press Inc., 1978.
77. Working Outside: A Career and Self-Employment Handbook. Harmony Publications, 1980.
78. The Yellow Pages of Careers. Interstate Printers and Publishers, Inc., 1977.
79. 1999 - The World of Tomorrow. Learning Concepts, latest edition.

APPENDIX A

Employment in Industry in the Washington, D.C. Metropolitan Area, 1974 to 1985

<u>Industry</u>	<u>Estimated 1974 Employment</u>	<u>Projected 1985 Employment</u>	<u>Annual Average Percent Change</u>
Total, All Industries	1,416,660	1,795,290	2.4
Agriculture, Forestry & Fisheries	9,730	8,220	-1.4
Mining	1,100	1,020	-0.7
Construction	106,950	127,680	1.8
Manufacturing	62,250	74,160	1.2
Transportation, Communications & Public Utilities	79,260	99,000	2.3
Wholesale & Retail Trade	259,790	328,030	2.4
Finance, Insurance & Real Estate	87,220	118,280	3.2
Services	456,920	601,790	2.9
Government Public Administration	350,450	437,110	2.2

SOURCE: D.C. Department of Manpower, Division of Manpower Reports and Analysis, in cooperation with the U.S. Department of Labor, Bureau of Labor Statistics, State and Area Projections Program.

Listed below are 20 occupations with the greatest number of openings locally.

<u>Occupation</u>	<u>Total Annual Average Openings</u>
Secretaries, except legal and medical	11,500
Typists	3,900
Cashiers	1,730
Bookkeepers	1,720
Public Officials and Administrators	1,510
Accountants	1,340
Lawyers	1,310
Waiters	1,280
Receptionists	1,110
Registered Nurses	1,090
Practical Nurses	950
Real Estate Agents	920
Nurses' Aides and Orderlies	920
Editors and Reporters	880
Electrical Engineers	760
File Clerks	760
Cooks	730
Statistical Clerks	720
Operations, Systems Researchers	700
Personnel, Labor Relations	690
Total	34,560
Percent of All Occupations	36.4

These 20 accounted for 28% of the estimated employment in 1974 and 29% of the projected employment in 1985.

Of the projected growth in total employment, the most significant gains, 38%, will occur in the service industries (personal services, education, legal and medical care, business services). Within the service will grow the fastest.

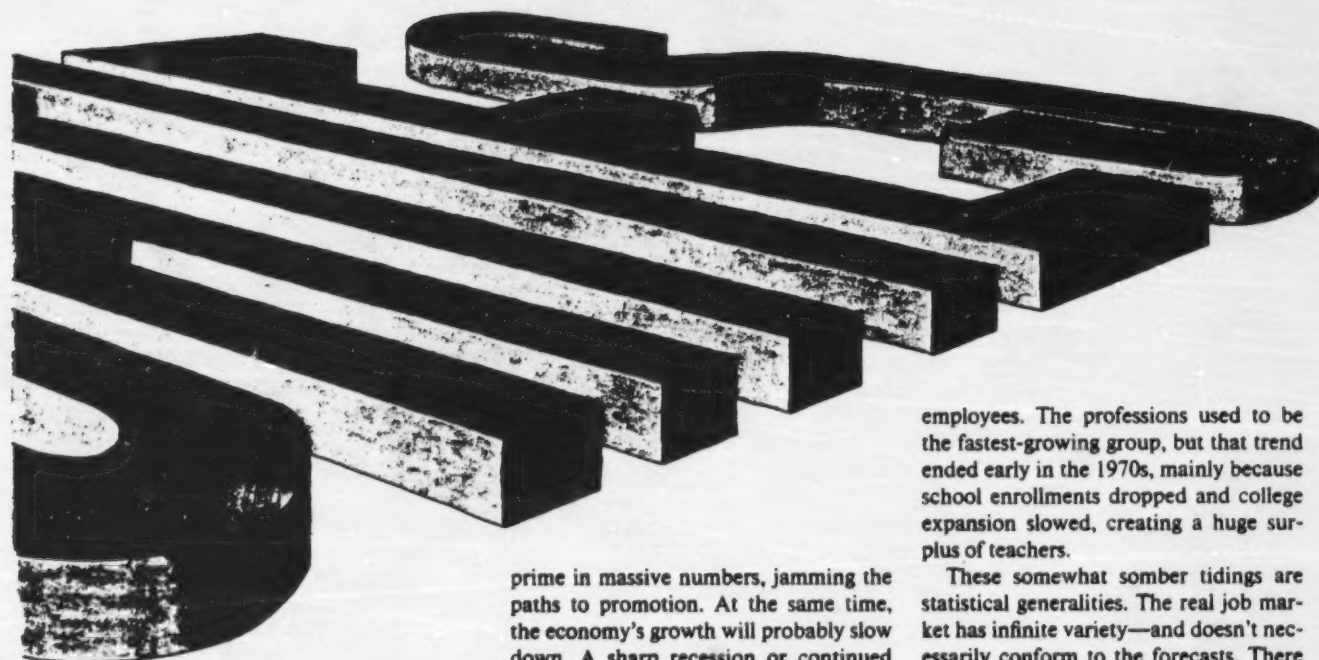
The growth in the service sector of the economy that we see in the Washington Metro area is repeated on a smaller scale throughout the country. For the country at large the ten areas with the most job openings are secretarial work, retail sales, custodians, cashiers, bookkeepers, hospital services, cooks and chefs, elementary teachers, registered nurses and assemblers. All except the assemblers and teachers are classified as service oriented workers. According to other national statistics, the second fastest growing occupation in America is security guard.

The Right Stuff for Careers in the



In a decade of wrenching economic change, legions of grown-up war babies will compete for a pinched supply of executive jobs. Technical training —and flexibility—provide insurance for getting ahead.

(Reprinted with permission from Money Magazine, May 1980.)



by Jeremy Main

Americans will find plenty of jobs waiting for them in the 1980s, but competition for challenging, high-paid positions will be keener than at any time since World War II. In this special report, Money surveys the prospects for people just starting out or in mid-career. Employment specialists assess various lines of work and educational paths, and people who have changed careers or are planning to switch talk about why and how they do it.

Success in the '80s will require an unusual degree of education, initiative—or plain luck. In the view of labor and career specialists, many people will have to settle for less than they expect in the way of pay, promotions and satisfaction. During this decade, the babies of the postwar boom will reach their working

prime in massive numbers, jamming the paths to promotion. At the same time, the economy's growth will probably slow down. A sharp recession or continued double-digit inflation or both, as well as interruptions in oil supplies and policy flip-flops in Washington, could limit career prospects.

Call for clerks

Even if the economy provides 20 million new civilian jobs by 1990, raising the total to 114 million, as the Bureau of Labor Statistics estimates, more than half the openings will be routine and low paying. Throughout the economy, routine jobs are multiplying faster than more rewarding ones. For example, employment in the labor-intensive service businesses has lately been growing faster than in the higher-paying manufacturing and mining industries.

In its forthcoming *Occupational Outlook Handbook*, the BLS estimates that twice as many new clerks as managers will be needed in the 1980s. Jobs for cashiers and janitors will grow faster than openings for professional and technical

employees. The professions used to be the fastest-growing group, but that trend ended early in the 1970s, mainly because school enrollments dropped and college expansion slowed, creating a huge surplus of teachers.

These somewhat somber tidings are statistical generalities. The real job market has infinite variety—and doesn't necessarily conform to the forecasts. There will, as always, be tremendous opportunities for people who choose the right career, the right employer or the right part of the country—preferably all three. Furthermore, there are two big pieces of good news:

► As the 1980s progress, young people should be able to find entry-level jobs more easily than they can now. Because of the drop in the birth rate since the 1950s, smaller and smaller numbers of youngsters will reach working age. For example, there will be 400,000 fewer in 1985 than in 1980 and 800,000 fewer in 1990, a reduction in 10 years of more than 20%. That should make teenage unemployment, now 15.9%, less acute.

► The demand for engineers is exceptionally strong. As a heritage of the hiring slump in the early 1970s and the resulting drop in student enrollments, engineers are in short supply. "Engineers will be kings of the job market until the mid-1980s," says Van Evans, president

"We would kill
to get more programmers," jokes
a manpower specialist.

of Deutsch Shea & Evans Inc., a manpower consulting firm in New York.

Even if the market fades—and engineering does tend to have ups and downs—engineers who specialize in computer science should do well. The computer industry will remain uniquely promising through the 1980s and perhaps beyond.

Just as the number of memory cells that can fit on a silicon chip multiplied from 256 to 64,000 during the 1970s (and may quadruple by the middle of this decade), so the uses of computers are proliferating in office, factory, store, school, car and home. Working out the applications of this enormous amount of cheap computer power requires several times more systems analysts and programmers than colleges are producing. "We've seen this demand coming for a long time, but we are not prepared," says John Hamblen, chairman of computer science at the University of Missouri at Rolla. "The job market is just going wild."

Hamblen figures that the 12,000 to 14,000 new bachelors of computer science who graduate this year will have a choice of 55,000 jobs; the 3,000 new masters of computer science and the 300 Ph.D.s will be able to choose from 30,000 and 1,300 openings, respectively. Salaries for graduates of the better-known colleges start in the low \$20,000s for those with bachelor's degrees and in the low \$30,000s for Ph.D.s.

Scarce technologists

"We would kill to get more programmers," jokes a manpower specialist in a major consulting firm. Industry's needs seem insatiable. Bell Laboratories, for example, expects more than 30% of the professionals it hires this year to have degrees in computer science. Lower-level programmers trained, typically, at a two-year college aren't scarce, but Hamblen says the supply of programmers with four-year degrees probably won't match demand until the end of the decade.

Engineers with energy specialties have even hotter prospects right now than computer scientists. Among this year's crop of bachelors, reports the College Placement Council, petroleum engineers are being offered an average of \$23,800 and chemical engineers \$21,300. Expe-

rienced engineers in most fields are scarce too. Van Evans of Deutsch Shea & Evans says the "high-technology recruitment" index that his company keeps has never been so consistently strong as in the past two years.

Old engineering specialties are reviving to meet new demands. Since the country needs to burn more coal, jobs for mining engineers are expected to multiply faster than for any other kind of engineers; however, the number of openings won't be large. After being grounded through most of the '70s, aerospace engineers have been put back in the cockpit by a healthy volume of orders for aircraft. A decade ago, Boeing's layoffs in Seattle were catastrophic. But recently, to get through a peak of work readying its 767 and 757 commercial jets for their maiden flights in 1981 and 1982, the company borrowed engineers from Britain and Canada.

The current enthusiasm of recruiters shouldn't lull engineers into forgetting



that they're in a cyclical profession, dependent on the state of the economy and political moods, or that their training sometimes leads to dead-end jobs and early obsolescence. An engineer who keeps abreast of changes in his field and looks for opportunities in management, or is willing to move around the country, runs less risk of a stunted career.

Corporate managers are much in demand at the moment, whether they're new graduates of business schools, middle managers or senior executives. Recruiters don't seem to be digging in yet for a recession. But during the 1980s, as the baby-boom crowd advances into middle age, the number of Americans in the 35-to-44 age group will grow 50%, to 37 million. The implications for ambitious workers approaching mid-career are sobering. The number of people in these prime years for promotion will be increasing $2\frac{1}{2}$ times as fast as the number of good management and professional jobs. That means it will be more than twice as hard to rise to, say, vice pres-

ident in this decade as it was in the '70s.

Pearl Meyer, executive vice president of the New York management consulting firm of Handy Associates, doesn't see a problem for talented people. She argues that "the failure of our educational and value systems" will make good managers scarce because fewer people have a strong work ethic or a sound education. But Mrs. Meyer is decidedly in a minority. A more dour—and more typical—opinion comes from Roderic Hodgins, a psychologist in Cambridge, Mass. who specializes in career problems. Says he: "It's going to be one sweet scrimmage."

Graduates galore

To make matters worse, American colleges will continue to turn out more graduates than the economy needs. The BLS estimates that in the 1980s, as in the 1970s, one in four college graduates will have to take a job beneath his expectations. This disturbing trend began in the 1970s, when graduates who got professional and managerial jobs dropped from 90% to 66%, and some 30% had to accept clerical, sales and unskilled blue-collar jobs. In the 1960s, only 7% of college graduates settled for such positions.

In his recent book, *Good Jobs, Bad Jobs, No Jobs* (1979), Columbia economist Eli Ginzberg writes: "To the extent that large numbers of graduates are forced into accepting second-best or even third-best jobs, the odds are strong that their work behavior will reflect their restiveness and disenchantment. . . . Some will overcome their disappointment and frustration, many others are likely to carry them to their grave."

This scrimmage for jobs will come at a particularly bad time for women and blacks. Far more women broke into professions and management in the 1970s than ever before. To a lesser extent, so did more blacks. A few stars achieved highly visible positions at the top. The question for the 1980s: Having opened the doors to women and blacks, will business now invite them upstairs in significant numbers? They should by rights now start moving up to middle and upper management. But they'll be fighting the population bulge, a slowing economy and resistance from the white males who dominate some industries. ➡

"A mechanical engineer may end up being a mechanical engineer all his life."

Several specialists in minority employment told *Money* they thought progress in the 1980s might be disappointing. Betty Vetter, head of the private Scientific Manpower Commission in Washington, says women are welcomed into engineering with starting salaries a shade higher than men's. But then the climb gets tougher. "Many men go into engineering because they think it's manly," she asserts. "Men in that field are assumed to be competent, but women have to prove it over and over." Unfortunately, quite a few male executives in a variety of companies still believe they are taking a risk when they promote a woman.

Hope for generalists

The job market of the '80s will put a particular premium on people who pick the best industry, company and region to work in. Health services, for example, will expand vigorously while manufacturing jobs will barely increase. Banking, retailing, insurance and real estate will need more new people than will government, which must hold down spending to bring inflation under control and appease taxpayers.

Today's graduates tend to be particularly choosy about where in the U.S. they want to work. They can improve their prospects by being flexible. Whether they are bankers or broadcasters, they are more likely to prosper in regions or cities where the economy is growing faster than average.

The Sunbelt will continue to attract more businesses than the colder, costlier Northeast. When the top managers of electronics firms outside Boston want to expand, they quite likely will look south. Many mid-size American cities, inside and outside the Sunbelt, will offer expansive opportunities. Van Evans of Deutsch Shea & Evans expects strong growth in cities such as Austin, Charlotte, Raleigh, Tucson, Tulsa and others with metropolitan-area populations of around half a million. California still beckons to people in high-technology industries such as the computer, office equipment, communications and aerospace. But hiring in most other businesses there is slack and likely to remain so. Slower overall growth and the painfully high price of housing are taking some

of the glow out of the Golden State.

Inflation complicates the choice of a career. A few strong unions have contracts with escalators almost fully tied to the consumer price index, but most employers don't come close to keeping up with today's high inflation. Last year's average pay increase for white-shirt workers from clerks to presidents was 7.9%, while the CPI went up 13.3%. Jay Engel, compensation specialist for the American Management Associations, says most employers will not normally give more than a 10% raise in recognition both of merit and the rising cost of living. If a promotion is involved, the total could be 15%. Employees of nonprofit or government-regulated organizations, such as hospitals, schools, colleges and utilities, probably won't get even that much. But it is easier for professionals to adjust to inflation. Lawyers, doctors, accountants and consultants can simply raise their fees—within reason.

The most crucial choice of all is what



to study and where. In a job market glutted with college graduates, achieving a good record at a highly regarded college and picking the right specialties for the '80s becomes supremely important. For example, corporations have a growing need for people who know about corporate-government relations, international business and personnel work, which now goes by the puffy title of "human resources management." The Harvard Business School, among others, has expanded the instruction it offers in all three fields.

In spite of the advantage enjoyed now by business and engineering school graduates, there is a strong case for a liberal arts education. True, few recruiters chase the humanities major. If he lands a first job with any promise at all, it will pay on average \$11,800, which is less than apprentice plumbers get in many cities. But, says James O'Toole, a business professor at the University of Southern California, "The initial advantage of the specialist disappears quickly. Someone like a me-

chanical engineer may end up being a mechanical engineer all his life. Generalists have greater mobility and options." The board chairman, college president or magazine editor, adds O'Toole, is more likely to be a generalist than a specialist. Robert Schrank, a Ford Foundation authority on careers, believes that success in English studies is the best long-run predictor of overall success.

In pure economic terms, it may be more tempting than ever during the 1980s to skip college and choose a blue-collar trade instead. The demand for many skilled craftsmen, such as business-machine and computer repairers, iron and sheet-metal workers, tool-and-die makers and boilermakers, is growing rapidly. Those skills can be learned during a paid apprenticeship, or at a vocational school or a two-year college. A skilled worker with a strong union behind him can well earn \$20,000 to \$30,000 a year; long-haul truck drivers are paid \$30,000 or more. The average male college graduate earned about \$22,500 last year, and women graduates averaged \$13,300.

In blue-collar careers, James O'Toole of Southern Cal reports a gathering trend: more and more businesses are being started by young people of entrepreneurial spirit who don't want to go to college but don't want to limit their ambitions either. In six months to a year they can learn a skill such as repairing roofs or installing swimming pools. Then, instead of going to work for someone else, they set up their own businesses. "Some of them are millionaires by the time they are 30," says O'Toole.

Recycled executives

In a way, these "wealthy dropouts" illustrate what it takes to be successful in the 1980s. They've seen an opportunity and grabbed it. The '80s are likely to be hard on those who can't adjust. If that sounds unsettling, it is. Accelerating technological change will hasten the obsolescence of some jobs and the creation of others. Like our way of living, our way of working is in flux. Few people will stick to one career all their lives. Says management consultant Pearl Meyer half seriously: "I am told by the sociologists that the typical new executive will have two families and three career cycles." ■

From best to worst

To determine which professions stand to fare best—and worst—in the '80s, *Money* studied data from the Bureau of Labor Statistics and colleges, professional associations and recruiting firms. Occupations then were ranked by

weighting the four factors detailed in the table below. Computer systems analysts placed first partly because of their excellent prospects of getting jobs and promotions. Doctors earn much more but rank second because of an expected surfeit of them in major cities. A more acute oversupply pushes lawyers

further down the list. By contrast, opportunities abound for military officers, but low pay reduces their ranking. In the table, the typical starting salary is for those with bachelor's degrees; for doctors, dentists and lawyers, it's for the first year of practice. The mid-career salary is for 10 years' experience.

Occupation (1978 Employment)	Estimated Growth in Jobs to 1990	Prospects for Job Seekers	Starting Salary	Mid-career Salary	
THE SUNNIEST					
Computer systems analyst (182,000)	37%	Excellent	\$16,500	\$24,000	Add management skills and you can write your own program for advancement.
Doctor (408,000)	38%	Good	\$45,000	\$82,000	Best of both worlds: the demand is in small towns, the money is in big cities.
Health service administrator (180,000)	57%	Good	\$18,000	\$37,500	Health care is booming, but a master's in business or health management is a must.
Geologist (31,000)	36%	Good	\$17,600	\$31,000	Domestic oil exploration will easily soak up the supply of degree holders.
Engineer (1,136,000)	27%	Good	\$19,200	\$35,000	Energy specialists strike a gusher, but budget cuts cap need for civil engineers.
Dentist (120,000)	29%	Good	\$27,000	\$53,000	New bridges to prosperity: corporate dental plans and in-store offices.
THE VARIABLES					
Dietitian (35,000)	43%	Good	\$14,000	\$25,000	Nutrition-consciousness feeds ample growth, but salaries are far from fat.
Economist (130,000)	39%	Good	\$14,500	\$45,000	Bad times are good for the dismal science, but beginners start low.
Banker (330,000)	35%	Good	\$12,500	\$27,000	Plenty of security, but when it comes to pay, the money stays in the vault.
Accountant (985,000)	29%	Good	\$14,000	\$31,000	In a money-maddened era, starting out is easy, but management spots are elusive.
Personnel administrator (405,000)	17%	Good	\$12,500	\$29,500	Job growth may be even faster than expected, but competition may be stiff.
Physicist (44,000)	9%	Good	\$16,000	\$30,400	Bad news: jobs are few. Good news: number of qualified grads is fewer.
THE CLOUDIEST					
Teacher (2,409,000)	2%	Poor	\$11,000	\$17,000	Budget cuts and declining enrollments teach a bitter lesson to newcomers.
Military officer (272,530)	1%	Good	\$10,000	\$22,000	Housing and living allowances (not included) won't shore up sorry pay scales.
Newspaper reporter (48,000)	20%	Poor	\$12,500	\$25,000	Writers blocked: Woodward, Bernstein and company inspired too many.
Public relations manager (131,000)	24%	Poor	\$12,000	\$32,000	When the economic news turns sour, the publicity people are the first to go.
Lawyer (487,000)	25%	Poor	\$18,000	\$50,000	Verdict: oversupply; sentence: less courtly compensation for years to come.
Architect (54,000)	43%	Poor	\$12,000	\$28,700	Some room at the top, but ground-level jobs are scarce and pay is poor.

FEB 26 1982

UNIVERSITY OF CALIFORNIA
ERIC[®] CLEARINGHOUSE FOR
JUNIOR COLLEGES
96 POWELL LIBRARY BUILDING
LOS ANGELES, CALIFORNIA 90024
EE 36